CLAIMS

1.   A method for processing an input signal, comprising the steps of:

(A)   extracting a compressed signal and a first checksum from said input signal;

5   (B)   generating a decompressed signal by decompressing said compressed signal;

(C)   calculating a second checksum for said decompressed signal; and

(D)   generating a result by comparing said first checksum

10   to said second checksum.

2.   The method according to claim 1, further comprising the steps of:

extracting a quality value from said input signal, (i) said quality value indicating a correlation between an original

5   signal and a reconstructed signal and (ii) said reconstructed signal being generated by decompressing said compressed signal; and

transferring said decompressed signal, said quality value and said result to a user.

3.   The method according to claim 2, wherein (i) said input signal comprises a digital video bitstream in an encoded form, (ii) said quality value comprises a peak signal-to-noise ratio, (iii) said first checksum comprises a cyclic redundancy check and (iv) said result indicates one of a match and a non-match between said first checksum and said second checksum.

4.   The method according to claim 1, wherein step (C) comprises the sub-step of:

calculating said second checksum for a sub-picture of video in said decompressed signal.

5.   The method according to claim 1, wherein step (C) comprises the sub-step of:

calculating said second checksum for a macroblock of video in said decompressed signal.

6.   The method according to claim 1, wherein said second checksum comprises a plurality of checksums, one each for at least a luminance channel, a first chrominance channel and a second chrominance channel of said decompressed signal.

7.   The method according to claim 1 wherein said decompressed signal comprises an audio signal.

8.   The method according to claim 1, wherein said input signal is compliant with at least one of an International Organization for Standardization/International Electrotechnical Commission 14496-10 standard and an International Telecommunication

5   Union-Telecommunications Standardization Sector Recommendation H.264 accounting for said first checksum.

9.   The method according to claim 1, wherein step (C) comprises the sub-step of:

calculating said second checksum by summing each absolute difference of two consecutive data samples over a predetermined

5   number of said consecutive data samples within said decompressed signal.

10. A method for processing an input signal, comprising the steps of:

(A) extracting a compressed signal and a quality value from said input signal, (i) said quality value indicating a correlation between an original signal and a reconstructed signal and (ii) said reconstructed signal being generated by decompressing said compressed signal;

(B) generating a decompressed signal by decompressing said compressed signal; and

(C) transferring said decompressed signal and said quality value to a user.

11. The method according to claim 10, further comprising the steps of:

extracting a first checksum from said input signal;

calculating a second checksum for said decompressed signal;

generating a result by comparing said first checksum to said second checksum; and

transferring said result to said user.

12. The method according to claim 11, wherein (i) said input signal comprises a digital video bitstream in an encoded form, (ii) said quality value is a peak signal-to-noise ratio, (iii) said first checksum comprises a cyclic redundancy check and (iv) said result indicates one of a match and a non-match between said first checksum and said second checksum.

13. The method according to claim 10, wherein said quality value comprises a signal-to-noise ratio having a noise component based on a difference between said original signal and said reconstructed signal.

14. The method according to claim 10, wherein said quality value comprises a sum of absolute differences between said original signal and said reconstructed signal.

15. The method according to claim 10, wherein said quality value comprises a plurality of values, one each for at least a luminance channel, a first chrominance channel and a second chrominance channel of said original signal.

16. The method according to claim 10, wherein said input signal is compliant with at least one of an International Organization for Standardization/International Electrotechnical Commission 14496-10 standard and an International Telecommunication

5 Union-Telecommunications Standardization Sector Recommendation H.264 accounting for said quality value.

17. A method for processing an original signal, comprising the steps of:

(A) generating a compressed signal by compressing said original signal;

5 (B) generating a reconstructed signal by decompressing said compressed signal;

(C) calculating at least one of (i) a first checksum for said reconstructed signal and (ii) a quality value indicating a correlation between said original signal and said reconstructed

10 signal; and

(D) generating an output signal comprising said compressed signal and said at least one of said checksum and said quality value.

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18. The method according to claim 17, wherein said first checksum comprises a plurality of checksums, one each for at least a luminance channel, a first chrominance channel and a second chrominance channel of said original signal.

19. The method according to claim 17, wherein said first checksum covers a sub-picture of video in said reconstructed signal.

20. The method according to claim 17, wherein said first checksum covers a macroblock of video in said reconstructed signal.

21. The method according to claim 17, wherein (i) said original signal comprises a video signal, (ii) said quality value comprises a peak signal-to-noise ratio and (iii) said first checksum comprises a cyclic redundancy check.

22. The method according to claim 17, wherein said original signal comprises an audio signal.

23. The method according to claim 17, further comprising the step of:

transferring said quality value to a user.

24. The method according to claim 17, wherein said output signal is compliant with at least one of an International Organization for Standardization/International Electrotechnical Commission 14496-10 standard and an International Telecommunication Union-Telecommunications Standardization Sector Recommendation H.264 accounting for said quality value and said first checksum.

25. The method according to claim 17, wherein step (C) comprises the sub-step of:

calculating said first checksum by summing each absolute difference of two consecutive data samples over a predetermined number of said consecutive data samples within said reconstructed signal.